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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------------------|------------------|
| 10/761,274 | 01/22/2004 | Tsuyoshi Kaneko | 118117 | 3171 |
| 25944 | 7590 | 05/16/2006 | | |
| OLIFF & BERRIDGE, PLC P.O. BOX 19928 ALEXANDRIA, VA 22320 | | | EXAMINER PETKOVSEK, DANIEL J | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2874 | |

DATE MAILED: 05/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/761,274

Applicant(s)

KANEKO ET AL.

Examiner

Daniel J. Petkovsek

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed March 13, 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) 1-21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 22-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on January 22, 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2/1/06.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

This office action is in response to the amendment filed March 13, 2006. In accordance with the amendment, claims 22, 24, 25, and 27 have been amended. Claims 1-27 are pending (please note that claims 1-21 have been previously withdrawn as being related to a non-elected group).

Information Disclosure Statement

1. The prior art documents submitted by Applicant in the Information Disclosure Statements filed on February 1, 2006, have been considered and made of record (note attached copy of forms PTO-1449).

Claim Rejections - 35 USC § 103

2. Claims 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cox et al. US 2001/0048968 A1.

Cox et al. US 2001/0048968 A1 teaches (Figs. 5-9; [0030]-[0032]) a method of manufacturing an optical element that receives light, comprising: forming a base member 22 over a light-receiving surface 14, forming an optical element precursor by discharging droplet(s) to the top of the surface of the base member 22, forming an optical element (gradient index lens, etc) by curing/heating the optical element precursor, which clearly, fully meets Applicant's claimed limitations. Cox et al. '968 does not *explicitly* teach that the base member 22 is "columnar-shaped". However, a person having ordinary skill in the art at the time the invention was made would have recognized using a number of shapes and sizes for the base member 22 of Cox et al. '968. It is noted that the **shape of the top surface** of the base member is what directly affects the resulting output of the formation of the optical element (see Applicant's specification

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[0074]-[0078]. Making the base member “columnar” as claimed by Applicant, could simply make the obvious change of altering the distance between the focal point and the bottom of the base 22, since Applicant *does not claim* any particular shape of the top surface. In this sense at least, the shape of the base member is non-critical to the claimed invention.

Regarding claim 23, the base member 14 inherently passes a “predetermined” wavelength, relative to its optical characteristics.

Regarding claims 24 and 25, in another embodiment, layer 30 can be viewed as the base material, with layer 24 as the optical element, and as such, the shapes and angles of the base are angled acutely and/or in a tapered fashion, based upon curvatures.

Regarding claim 26, different wettabilities are disclosed (see [0038]).

Regarding claim 27, Cox et al. ‘968 does not explicitly teach that the optical element can be sealed or protected from the environment. A person having ordinary skill in the art at the time the invention was made would have recognized sealing/covering/protecting an optical element for the purpose of eliminating errors and outside influences that would decrease optical coupling performance. Official notice has been taken to this claim limitation.

Response to Arguments

3. Applicant's arguments filed March 13, 2006 have been fully considered but they are not persuasive. Applicant asserts that the new limitation of making the base member “columnar-shaped” overcomes the relevant prior art of record. The Examiner respectfully disagrees with this assertion.

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4. Referencing Applicant's specification (see [0074]-[0078]), Applicant asserts that the *top surface* of the base member 110 controls the shape of the optical element 111 that is formed. The shape of the optical element is not limited by the *base* being "columnar-shaped" alone. It is noted that a "column" could have a square, triangular, round, elliptical, etc shaped top surface. As such, the shape of the base (without discussing the shape of the top surface) alone is non-critical to the invention as claimed and as disclosed in the specification.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J. Petkovsek whose telephone number is (571) 272-2355. The examiner can normally be reached on M-F 8:30-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (571) 272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Daniel Petkovsek
May 13, 2006


AKM ENAYET ULLAH
PRIMARY EXAMINER